

Welcome to STN International! Enter x:x

LOGINID: ssspta16191xw

PASSWORD :

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 Jun 03 New e-mail delivery for search results now available  
NEWS 4 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
NEWS 11 Oct 24 BEILSTEIN adds new search fields  
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on  
STN  
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 14 Nov 25 More calculated properties added to REGISTRY  
NEWS 15 Dec 04 CSA files on STN  
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date  
NEWS 17 Dec 17 TOXCENTER enhanced with additional content  
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN  
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,  
ENERGY, INSPEC  
NEWS 20 Feb 13 CANCERLIT is no longer being updated  
NEWS 21 Feb 24 METADEX enhancements  
NEWS 22 Feb 24 PCTGEN now available on STN  
NEWS 23 Feb 24 TEMA now available on STN  
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation  
NEWS 25 Feb 26 PCTFULL now contains images  
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
NEWS 27 Mar 20 EVENTLINE will be removed from STN  
NEWS 28 Mar 24 PATDPAFULL now available on STN  
NEWS 29 Mar 24 Additional information for trade-named substances without  
structures available in REGISTRY  
NEWS 30 Apr 11 Display formats in DGENE enhanced  
NEWS 31 Apr 14 MEDLINE Reload  
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced  
NEWS 33 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS  
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in  
WPIDS/WPINDEX/WPIX  
NEWS 35 Apr 28 RDISCLOSURE now available on STN  
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names  
added to PHAR  
NEWS 37 May 15 MEDLINE file segment of TOXCENTER reloaded  
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated  
NEWS 39 May 16 CHEMREACT will be removed from STN  
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA  
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and

right truncation

NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB  
NEWS 43 Jun 06 PASCAL enhanced with additional data

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

**NEWS HOURS STN Operating Hours Plus Help Desk Availability**

**NEWS FEEDS** Six operating feeds plus one  
**NEWS INTER** General Internet Information

[NEWS INTER](#)      General Internet Information  
[NEWS LOGIN](#)      Welcome Banner and News Items

**NEWS ECRIN** Welcome Banner and News Feeds  
**NEWS PHONE** Direct Dial and Telecommunications

NEWS PHONE Direct Dial and Telecommunication Network Access to SIN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 08:09:12 ON 16 JUN 2003

=> fil req

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY

**TOTAL**

SESSION

**FULL ESTIMATED COST**

ENRRI

FILE 'REGISTRY' ENTERED AT 08:09:20 ON 16 JUN 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2  
DICTIONARY FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e c16eo6/cn

E1 1 C16B/CN

E2 1 C16EO4/CN

E3 1 --> C16EO6/CN

E4 1 C16H33-6

E6 1 C16N11/CN  
E7 1 C16N12/CN  
E8 1 C16N13/CN  
E9 1 C16N14/CN  
E10 1 C16N15/CN  
E11 1 C16N8/CN  
E12 1 C16ORF3 LARGE PROTEIN (HUMAN GENE C16ORF3 REDUCED) /CN

=> s e3  
L1 1 C16EO6/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS  
RN 5168-91-2 REGISTRY  
CN 3,6,9,12,15,18-Hexaoxatetratriacontan-1-ol (6CI, 7CI, 8CI, 9CI) (CA  
INDEX  
NAME)  
OTHER NAMES:  
CN C16EO6  
CN Ethanol,  
2-[2-[2-[2-(hexadecyloxy)ethoxy]ethoxy]ethoxy]  
]-  
CN Hexa(oxyethylene) monohexadecyl ether  
CN Hexaethylene glycol hexadecyl ether  
CN Hexaethylene glycol mono n-hexadecyl ether  
CN Hexaethylene glycol monocetyl ether  
CN Hexaethylene glycol monohexadecyl ether  
FS 3D CONCORD  
MF C28 H58 O7  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM,  
DETERM\*, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)

PAGE 1-A

HO—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—CH<sub>2</sub>—CH<sub>2</sub>—O—

PAGE 1-B

—CH<sub>2</sub>—CH<sub>2</sub>—O—(CH<sub>2</sub>)<sub>15</sub>—Me

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

99 REFERENCES IN FILE CA (1957 TO DATE)  
99 REFERENCES IN FILE CAPLUS (1957 TO DATE)  
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

6.30

SESSION

6.51

STN INTERNATIONAL LOGOFF AT 08:09:45 ON 16 JUN 2003

Welcome to STN International! Enter x:x

LOGINID: sssptal619lxw

PASSWORD :

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 Jun 03 New e-mail delivery for search results now available  
NEWS 4 Aug 08 PHARMAMarketLetter (PHARMAML) - new on STN  
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
NEWS 11 Oct 24 BEILSTEIN adds new search fields  
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on  
STN  
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 14 Nov 25 More calculated properties added to REGISTRY  
NEWS 15 Dec 04 CSA files on STN  
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date  
NEWS 17 Dec 17 TOXCENTER enhanced with additional content  
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN  
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,  
ENERGY, INSPEC  
NEWS 20 Feb 13 CANCERLIT is no longer being updated  
NEWS 21 Feb 24 METADEX enhancements  
NEWS 22 Feb 24 PCTGEN now available on STN  
NEWS 23 Feb 24 TEMA now available on STN  
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation  
NEWS 25 Feb 26 PCTFULL now contains images  
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
NEWS 27 Mar 20 EVENTLINE will be removed from STN  
NEWS 28 Mar 24 PATDPAFULL now available on STN  
NEWS 29 Mar 24 Additional information for trade-named substances without  
structures available in REGISTRY  
NEWS 30 Apr 11 Display formats in DGENE enhanced  
NEWS 31 Apr 14 MEDLINE Reload  
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced  
NEWS 33 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS  
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in  
WPIDS/WPINDEX/WPIX  
NEWS 35 Apr 28 RDISCLOSURE now available on STN  
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names  
added to PHAR  
NEWS 37 May 15 MEDLINE file segment of TOXCENTER reloaded  
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated  
NEWS 39 May 16 CHEMREACT will be removed from STN  
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA  
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and

right truncation

NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB  
NEWS 43 Jun 06 PASCAL enhanced with additional data

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

**NEWS HOURS STN Operating Hours Plus Help Desk Availability**

**NEWS INTER** General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS LOCAL Welcome Panel and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS PHONE Direct Dial and Telexcommunication NETWORK ACT  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 08:12:49 ON 16 JUN 2003

=> fil reg

**COST IN U.S. DOLLARS**

SINCE FILE

**TOTAL**

## ENTRY

SION

FILE 'REGISTRY' ENTERED AT 08:12:57 ON 16 JUN 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2  
DICTIONARY FILE UPDATES: 13 JUN 2003 HIGHEST RN 530739-23-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s c16eo6/cn

L1 1 C16EO6/CN

=> fil caplus uspatfull biosis embase medline

**COST IN U.S. DOLLARS**

SINCE FILE

**TOTAL**

FULL ESTIMATED COST 4.62 4.83

FILE 'CAPLUS' ENTERED AT 08:13:20 ON 16 JUN 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 08:13:20 ON 16 JUN 2003  
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 08:13:20 ON 16 JUN 2003  
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'EMBASE' ENTERED AT 08:13:20 ON 16 JUN 2003  
COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'MEDLINE' ENTERED AT 08:13:20 ON 16 JUN 2003

=> s l1  
L2 100 L1

=> s l2(p)surfactant  
L3 15 L2(P) SURFACTANT

=> dup rem.13  
PROCESSING COMPLETED FOR L3  
L4 15 DUP REM L3 (0 DUPLICATES REMOVED)

=> d ibib

L4 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2001:170835 CAPLUS  
DOCUMENT NUMBER: 134:307479  
TITLE: DNA Capillary Electrophoresis in Entangled Dynamic Polymers of Surfactant Molecules  
AUTHOR(S): Wei, Wei; Yeung, Edward S.  
CORPORATE SOURCE: Department of Chemistry, Ames Laboratory-USDOE Iowa State University, Ames, IA, 50011, USA  
SOURCE: Analytical Chemistry (2001), 73(8), 1776-1783  
CODEN: ANCHAM; ISSN: 0003-2700  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 2-6 ibib

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2000:788486 CAPLUS  
DOCUMENT NUMBER: 134:106327  
TITLE: Capillary rise of surfactant solutions  
AUTHOR(S): Tiberg, F.; Zhmud, B.; Hallstensson, K.; von Bahr, M.  
CORPORATE SOURCE: Forest Product Section, Institute for Surface Chemistry, Stockholm, S-114 86, Swed.  
SOURCE: Physical Chemistry Chemical Physics (2000), 2(22), 5189-5196

CODEN: PPCPFQ; ISSN: 1463-9076  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1999:90549 CAPLUS  
DOCUMENT NUMBER: 130:164988  
TITLE: Marker contained in carbon nano-encapsulate for detection of fibrin clots and for labeling macromolecules  
INVENTOR(S): Burch, William Martin; Browitt, Rodney James; Nair, Chenicheri Hariharan; Shats, Elena Alexandra  
PATENT ASSIGNEE(S): The Australian National University, Australia  
SOURCE: PCT Int. Appl., 45 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9904826	A1	19990204	WO 1997-AU467	19970724
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9735321	A1	19990216	AU 1997-35321	19970724
WO 9904827	A1	19990204	WO 1998-AU582	19980723
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9884259	A1	19990216	AU 1998-84259	19980723
AU 744489	B2	20020228		
EP 1027080	A1	20000816	EP 1998-934690	19980723
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
JP 2001510812	T2	20010807	JP 2000-503878	19980723
PRIORITY APPLN. INFO.:			WO 1997-AU467	A 19970724
			WO 1998-AU582	W 19980723
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE		
FORMAT				

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:605754 CAPLUS  
DOCUMENT NUMBER: 129:281407

TITLE: Flexibility of Charged and Uncharged Polymer-like  
Micelles

AUTHOR(S): Jerke, Goetz; Pedersen, Jan Skov; Egelhaaf, Stefan  
Ulrich; Schurtenberger, Peter

CORPORATE SOURCE: Institut fuer Polymere, ETH Zuerich, Zurich, CH-8092,  
Switz.

SOURCE: Langmuir (1998), 14(21), 6013-6024

CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR  
THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:357148 CAPLUS  
DOCUMENT NUMBER: 129:69117

TITLE: Study of nonionic surfactant polarity by  
high-performance liquid chromatography

AUTHOR(S): Plaza, M.; Pons, R.

CORPORATE SOURCE: C.I.D. (C.S.I.C.), Departament Tecnologia de  
Tensioactius, c/Jordi Girona 18-26, Barcelona, 08034,  
Spain

SOURCE: Colloids and Surfaces, A: Physicochemical and  
Engineering Aspects (1998), 137(1-3), 287-293

CODEN: CPEAEH; ISSN: 0927-7757

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR  
THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:751693 CAPLUS  
DOCUMENT NUMBER: 130:115670

TITLE: Studies on UNIQUAC and SAFT equations for nonionic  
surfactant solutions

AUTHOR(S): Li, Xiao-Sen; Lu, Jiu-Fang; Li, Yi-Gui; Liu, Jin-Chen

CORPORATE SOURCE: Department of Chemical Engineering, Tsinghua  
University, Beijing, 100084, Peop. Rep. China

SOURCE: Fluid Phase Equilibria (1998), 153(2), 215-229

CODEN: FPEQDT; ISSN: 0378-3812

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR  
THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

=> d 7 ibib

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1997:636933 CAPLUS  
DOCUMENT NUMBER: 127:323123

TITLE: Structure of Nonionic Surfactant Layers Adsorbed at the Solid/Liquid Interface on Self-Assembled Monolayers with Different Surface Functionality: A Neutron Reflection Study

AUTHOR(S): Thirtle, P. N.; Li, Z. X.; Thomas, R. K.; Rennie, A. R.; Satija, S. K.; Sung, L. P.

CORPORATE SOURCE: Physical and Theoretical Chemistry Laboratory, University of Oxford, Oxford, OX1 3QZ, UK

SOURCE: Langmuir (1997), 13(20), 5451-5458  
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

=> d 8 ibib

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1998:80323 CAPLUS  
DOCUMENT NUMBER: 128:172435  
TITLE: Shear-induced structures in concentrated surfactant micellar phases  
AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Tiddy, G. J.  
T.;  
Lodi, A. Khan  
CORPORATE SOURCE: ISIS Fac., Rutherford Appleton Lab., Oxon, UK  
SOURCE: Journal of Applied Crystallography (1997), 30(5, Pt. 2), 744-749  
CODEN: JACGAR; ISSN: 0021-8898  
PUBLISHER: Munksgaard International Publishers Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

=> d 8 abs kwic

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS  
AB Const. and oscillatory Couette shear flow were used in combination with small-angle neutron scattering to observe the shear-induced ordering in concd. surfactant micellar phases. For the lamellar phase of hexaethylene glycol monohexadecyl ether, C16E6, two distinct lamellae orientations were identified. At low shear gradients the lamellae are ordered parallel to the flow-vorticity plane, whereas at higher shear gradients the lamellae order parallel to the flow-shear gradient plane, corresponding to a rotation through 90.degree. of the axis of orientation. At intermediate values of const. shear and for oscillatory shear, both lamellae orientations are simultaneously obsd. for the 1st time in a surfactant lamellar phase. for the lamellar phase, a dispersion of the binary surfactant mixts. of dioleyl cationic and 2-Et hexaglycerol monoether surfactants, a high degree of alignment, in the direction parallel to the flow-vorticity plane, is obsd. at zero and low shear. With time, during the application of a shear gradient of 25 s-1, the lamellar phase transforms to a highly ordered soln. of monodisperse multilamellar vesicles.

IT 5168-91-2, C16E6  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(shear-induced structures in concd. **surfactant** micellar  
phases)

=> d 9 ibib abs kwic

L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1996:637115 CAPLUS  
DOCUMENT NUMBER: 125:339812  
TITLE: Adsorption of Nonionic Surfactants on Silica Sol  
Particles: The Effects of Sol Type and Concentration,  
Surfactant Type, Concentration, and Temperature  
AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Cummins, P.  
CORPORATE SOURCE: ISIS Facility, Rutherford Appleton Laboratory,  
Chilton/ Didcot/ Oxon, UK  
SOURCE: Journal of Physical Chemistry (1996), 100(46),  
18133-18137  
CODEN: JPCHAX; ISSN: 0022-3654  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Small angle neutron scattering was used to study the nature of the  
adsorption of the alkyl polyoxyethylene ether (C<sub>n</sub>E<sub>Om</sub>) nonionic  
surfactants  
on Ludox silica sols. Variations in the adsorbed layer thickness and  
vol.  
fraction of surfactant in the adsorbed layer with sol type, concn.,  
temp.,  
and surfactant type are obsd. In particular, the structure of the  
adsorbed layer of the C<sub>12</sub>E<sub>06</sub> and C<sub>16</sub>E<sub>08</sub> surfactants (for which the bulk  
micellar phase is rodlike micelles) is similar to that found for C<sub>12</sub>E<sub>06</sub>  
and C<sub>12</sub>E<sub>05</sub> surfactants.  
IT 3055-96-7, C12E6 3055-98-9, C12E8 5168-91-2, C16E6  
5698-39-5, C16E8 7631-86-9, Silica, properties  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
PROC (Process)  
(SANS study of concn., **surfactant** type, and temp. effects on  
nonionic **surfactant** adsorption on silica sol particles)

=> d 10-15 ibib abs kwic

L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1996:311434 CAPLUS  
DOCUMENT NUMBER: 124:325896  
TITLE: Normal and Reverse Vesicles with Nonionic Surfactant:  
Solvent Diffusion and Permeability  
AUTHOR(S): Olsson, Ulf; Nakamura, Kazuyoshi; Kunieda, Hironobu;  
Strey, Reinhard  
CORPORATE SOURCE: Chemical Center, Lund University, Lund, S-221 00,  
Swed.  
SOURCE: Langmuir (1996), 12(12), 3045-3054  
CODEN: LANGD5; ISSN: 0743-7463  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Normal and reverse vesicle systems with nonionic surfactants were  
studied.

The solvent self-diffusion coeff. was measured by using the 1H-NMR Fourier transform pulsed gradient spin-echo technique. In the case of normal vesicles, the H<sub>2</sub>O solvent exchanges rapidly between the inside and outside of the vesicles on the exptl. time scale (.apprxeq. 0.1 s). Only an av. self-diffusion coeff. can be measured from which the fraction of entrapped H<sub>2</sub>O can be detd. In the reverse vesicle case, the authors observe either a fast or a slow exchange, depending on the oil nature and the bilayer compn. In particular, the authors studied a semipermeable membrane system where with mixed solvent, 1 of the 2 types of solvent mols. exchanges rapidly while the other exchanges slowly on the exptl. time scale. The lifetime of a solvent mol. inside the reverse vesicles depend on the compn. of the mixed reverse bilayers, leading to an obsd. transition from fast to slow exchange conditions when varying the bilayer compn. In the slow exchange case, the self-diffusion coeffs. of solvent mols. on the outside and inside of the vesicles (where the latter reports on the vesicle self-diffusion coeff.) are resolved in principal. From the bimodal type of decay of the spin-echo amplitude, it is also possible to det. directly the fraction of solvent mols. entrapped inside the vesicles.

IT 57-50-1D, esters with fatty acids 110-82-7, Cyclohexane, properties 124-18-5, Decane 151-21-3, SDS, properties 544-76-3, Hexadecane 1450-14-2, Hexamethyldisilane 5168-91-2, C16E6 5274-68-0, C12E4 7732-18-5, Water, properties 25168-73-4D, Sucrose monoctadecanoate, mixt. with sucrose alkanoates 26446-38-8D, Sucrose monohexadecanoate, mixt. with sucrose alkanoates 27216-47-3D, Sucrose monotetradecanoate, mixt. with sucrose alkanoates

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(Fourier transform pulsed gradient spin-echo NMR study of normal and reverse nonionic **surfactant** vesicle permeability and solvent self-diffusion)

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1996:153288 CAPLUS  
DOCUMENT NUMBER: 124:205629  
TITLE: Physical characterization of non-ionic surfactant layers adsorbed at hydrophilic and hydrophobic solid surfaces by time-resolved ellipsometry  
AUTHOR(S): Tiberg, Fredrik  
CORPORATE SOURCE: Physical Chem. 1, Lund Univ., Lund, S-22100, Swed.  
SOURCE: Journal of the Chemical Society, Faraday Transactions (1996), 92(4), 531-8  
CODEN: JCFTEV; ISSN: 0956-5000  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Nonionic surfactant adsorption at hydrophobic and hydrophilic silica surfaces has been studied by time-resolved ellipsometry. Adsorption isotherms obtained for polyethylene glycol monoalkyl ethers (C<sub>n</sub>E<sub>m</sub>) at these surfaces are presented together with data on the adsorbed layer thickness and refractive index, giving information about the concomitant evolution of the mol. organization within the adsorbed layers. It is shown that, whereas the surfactants are adsorbed as sub-monolayers or monolayers at hydrophobic surfaces, they form surface micelles or bilayer-type aggregates at hydrophilic silica. The adsorption/desorption kinetics of the surfactants at the different surfaces have also been

investigated. A kinetic model based on the assumption of diffusive transport of surfactants through a stagnant layer, coupled with the idea of a local equil. existing between the adsorbed layer and the soln. in its

immediate vicinity, is used to interpret the exptl. results. This was found to reproduce quant. the main features of the time dependence obsd. during adsorption and desorption at hydrophilic as well as hydrophobic silica.

IT 3055-95-6, Pentaethylene glycol dodecyl ether 3055-96-7, Hexaethylene glycol dodecyl ether 3055-98-9, Octaethylene glycol dodecyl ether 5157-04-0, Hexaethylene glycol tetradecyl ether 5168-91-2, Hexaethylene glycol hexadecyl ether

RL: PEP (Physical, engineering or chemical process); PRP (Properties);

TEM

(Technical or engineered material use); PROC (Process); USES (Uses) (nonionic **surfactant** layers adsorbed at hydrophilic and hydrophobic solid surfaces)

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:320754 CAPLUS

DOCUMENT NUMBER: 125:42592

TITLE: The effect of shear on the adsorption of non-ionic surfactants at the liquid-solid interface

AUTHOR(S): Penfold, J.; Staples, E.; Tucker, I.; Fragnetto, G..

CORPORATE SOURCE: ISIS Facility, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon, UK

SOURCE: Physica B: Condensed Matter (Amsterdam) (1996), 221(1-4), 325-330

CODEN: PHYBE3; ISSN: 0921-4526

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The structure of surfactant micellar solns. subjected to shear was studied

by neutron reflection (complemented by other scattering methods) to det. the distribution of surfactant in the vicinity of the shear cell wall. The construction of a shear cell for neutron reflectivity measurements is described, and some recent preliminary results on the effect of shear on the adsorption of nonionic surfactant (hexaethylene glycol monohexadecyl ether (C16E6)) at the planar Si/soln. interface are discussed. These results provide direct evidence of shear-induced structures in the vicinity of the cell wall. At a low surfactant concn., ordered layering of the surfactant sepd. by solvent-rich regions, and extending into the bulk soln. is obsd., in addn. to the adsorbed layer on the solid surface. The application of Poiseuille shear flow appears to induce a more ordered and well-defined structure at the interface.

IT 5168-91-2, C16E6 7440-21-3, Silicon, properties 7631-86-9, Silica, properties

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(neutron reflection study of nonionic **surfactant** soln. interfacial structure at solid wall during shear flow)

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:629886 CAPLUS

DOCUMENT NUMBER: 123:12382

TITLE: Polymer-Induced Microstructural Transitions in Surfactant Solutions

AUTHOR(S): Li, Xiangbing; Lin, Zuchen; Cai, Jim; Scriven, L. E.; Davis, H. T.

CORPORATE SOURCE: Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, 55455, USA

SOURCE: Journal of Physical Chemistry (1995), 99(27), 10865-78

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interactions of nonionic polymers poly(vinyl Me ether) (PVME), poly(propylene oxide) (PPO), poly(acrylic acid) (PAA), and ionic poly(sodium 4-styrenesulfonate) (PSS) with the wormlike micelles in aq. solns. of nonionic hexaethylene glycol monohexadecyl ether (C16E6), pentaethylene glycol monododecyl ether (C12E5), and cationic surfactant cetyltrimethylammonium bromide (CTAB)/sodium salicylate (NaSal) have been investigated by cryo-transmission electron microscopy and shear rheol. All the surfactant solns. were viscous, wormlike micellar solns. in the absence of polymers. The hydrophobic nonionic PPO induced a wormlike micelle to ribbon-shaped discoid micelle transition in C16E6 soln., and there is no appreciable change in C12E5 upon the addn. of PPO and PVME. The results indicate the surfactant-polymer interaction is enhanced with an increase in surfactant alkyl chain length. Both PVME and PPO induced

a wormlike-to-spherical micelle transition in the CTAB/NaSal soln. The contrast in the transitions between the C16E6 and CTAB with PPO addn. is due to the difference in the head groups which results in a difference in where the polymer resides in the surfactant aggregates. PSS has little effect on the CiEj systems, and PAA does not destroy the wormlike micelles of the CiEj before pptn. The effects of nonionic polymer are interpreted in terms of the theory developed by R. Nagarajan (1989).

IT 57-09-0, Cetyltrimethylammonium bromide 3055-95-6, Pentaethylene glycol monododecyl ether 5168-91-2, Hexaethylene glycol monohexadecyl ether

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)  
(surfactant; polymer-induced microstructural transitions in solns. of)

L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:568095 CAPLUS

DOCUMENT NUMBER: 123:65690

TITLE: Visceral leishmaniasis in the BALB/c mouse: a comparison of the in vivo activity of five nonionic surfactant vesicle preparations of sodium stibogluconate

AUTHOR(S): Williams, D. M.; Carter, K. C.; Baillie, A. J.

CORPORATE SOURCE: Dep. Immunol. Pharm. Sci., Univ. Strathclyde, Glasgow, G4 ONR, UK

SOURCE: Journal of Drug Targeting (1995), 3(1), 1-7

PUBLISHER: Harwood

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Five nonionic surfactants (Surfactants V-IX) were screened for their ability to produce vesicles for the delivery of sodium stibogluconate. Mean vesicle diam. and antimony content were detd. prior to in vivo assessment of antiparasitic activity in a mouse model of acute visceral leishmaniasis. V/D suspensions (i.e. stibogluconate-loaded vesicles kept

in the hydrating drug soln.) were more effective against spleen, liver and bone marrow parasites than drug-loaded vesicle suspensions that had unentrapped drug removed. A Surfactant IX V/D suspension was the most active antileishmanial prepn. causing 75 .+- . 10%, 99 .+- . 1% and 38 .+- . 8% suppression of liver, spleen and bone marrow parasite burdens resp. Contrary to previous findings, a redn. in splenic and bone marrow parasite burdens was achieved using large vesicles (mean diam. >800 nm). The significance of these results is discussed.

IT 5168-91-2, Hexaethylene glycol mono n-hexadecyl ether 5274-61-3  
5274-63-5, 3,6,9,12-Tetraoxaoctacosan-1-ol 26855-43-6, Triglycerol monostearate 34424-97-0, Hexaglycerol distearate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nonionic surfactant vesicles for sodium stibogluconate delivery in leishmaniasis)

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 1987:202260 CAPLUS  
DOCUMENT NUMBER: 106:202260  
TITLE: Interfacial tension of oil-brine systems in the presence of surfactant and cosurfactant  
AUTHOR(S): Ruckenstein, E.; Rao, I. V.  
CORPORATE SOURCE: Dep. Chem. Eng., State Univ. New York, Buffalo, Amherst, NY, 14260, USA  
SOURCE: Journal of Colloid and Interface Science (1987), 117(1), 104-19  
CODEN: JCISAS; ISSN: 0021-9797  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The interfacial tension between bulk oil and brine phases contg. a surfactant and a cosurfactant was calcd. by using a multicomponent adsorption isotherm model that accounts for the different sizes of the solute mols. as well as for the solute-solvent and solute-solute interactions in the surface phase. The presence of appreciable amts. of electrolyte in these systems alters the equil. distribution of a solute between the 2 bulk phases because of the salting-out effect, and the calcns. also account for this effect. The interfacial tension decreases with increasing concn. for both ionic and nonionic surfactants. However, for fixed values of total concns. of surfactant, the interfacial tension is much smaller for nonionic surfactants than for ionic surfactants, since the head group is larger in the former case. At fixed values of the surfactant concn., increasing amts. of cosurfactant and salt have the effect of lowering the interfacial tension. Other important parameters studied are the chain length of oil and the relative amts. of water and oil. The calcns. for both ionic and nonionic surfactants indicate that the interfacial tension decreases as the chain length of surfactant increases, while it goes through a min. as a function of cosurfactant chain length.

IT 142-87-0, Sodium decyl sulfate 151-21-3, Sodium dodecyl sulfate, properties 1191-50-0, Sodium tetradecyl sulfate 3055-96-7, Hexaoxyethylene monododecyl ether 5157-04-0 5168-91-2  
RL: PRP (Properties)  
(surfactant, adsorption of, at oil-brine interface)

ordered  
articles